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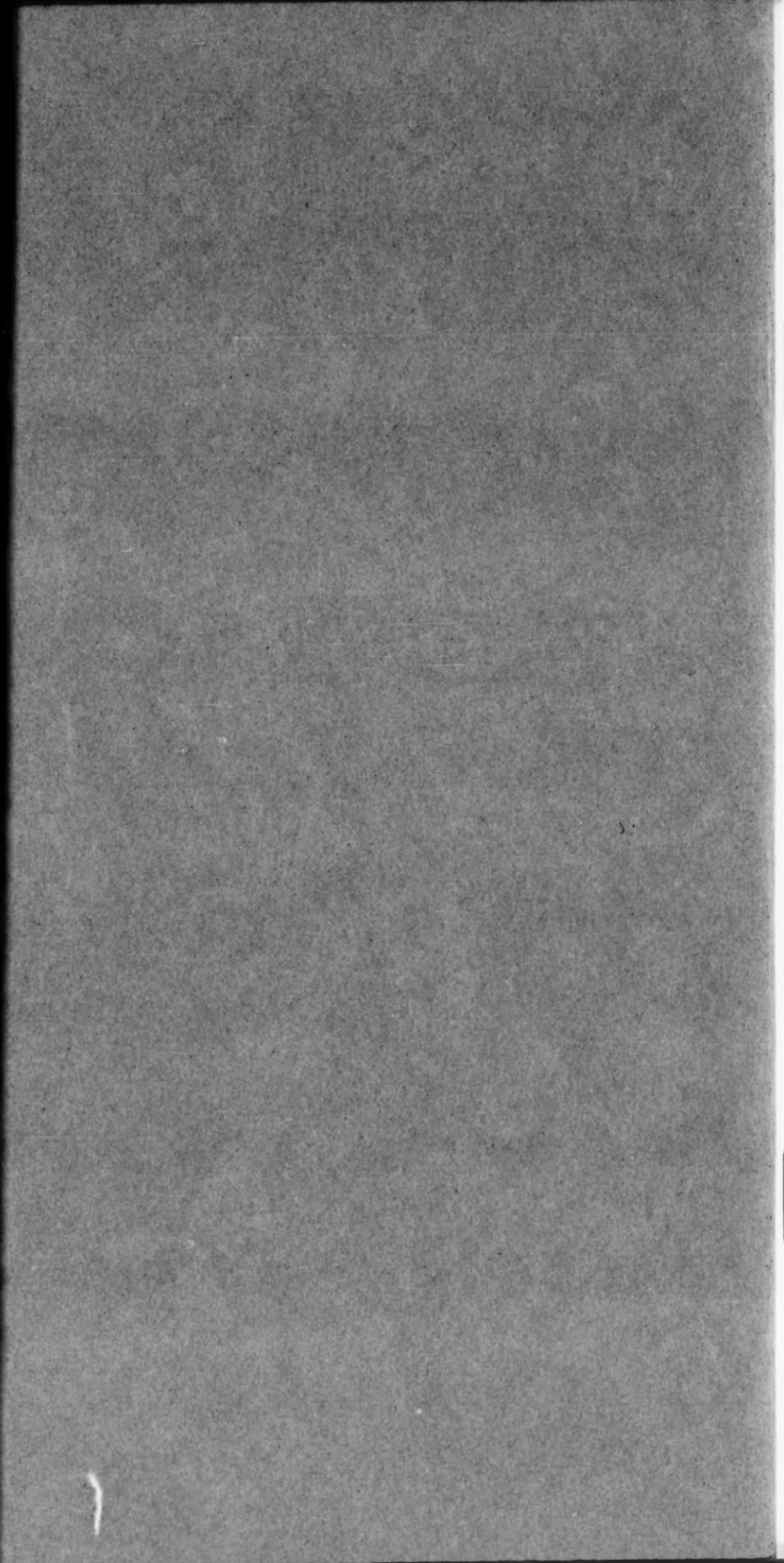


WASHINGTON

PUBLISHED BY THE NATIONAL GEOGRAPHIC SOCIETY

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THE
NATIONAL
GEOGRAPHIC MAGAZINE
VOLUME VI
JANUARY, 1894, TO MAY, 1895

W J McGEE, *Chairman* C. HART MERRIAM
Publication Committee



WASHINGTON
PUBLISHED BY THE NATIONAL GEOGRAPHIC SOCIETY
1895

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1894 AND TO MAY 31, 1895

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WASHINGTON

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PUBLICATIONS OF THE NATIONAL GEOGRAPHIC SOCIETY

REGULAR PUBLICATIONS

In addition to announcements of meetings and various circulars sent to members from time to time, the Society issues a single serial publication entitled *THE NATIONAL GEOGRAPHIC MAGAZINE*. During the first two years of the existence of the Society this serial was issued in quarterly numbers. With the beginning of the third year of the Society and the third volume of the *Magazine* the form of publication was changed, and the serial appeared at irregular intervals in parts or brochures (designated by pages and designed either for separate preservation or for gathering into volumes), consisting either of single memoirs or of magazine brochures made up of articles, notes, abstracts, and other geographic matter, together with the Proceedings and other administrative records of the Society. By reason of a change in the Society's season and fiscal year, volume VI extended from January 1, 1894, to May 31, 1895, and later volumes will coincide with the new season, namely, June 1 to May 31. Moreover, the numbers will be issued regularly hereafter, at periods to be announced in the first number of the new volume.

The *Magazine* is forwarded gratuitously to all members of the Society. The subscription price to the public will be, hereafter, \$2.00 a year. Members of the Society who want extra copies, and subscription agencies for the sale of the *Magazine*, are allowed a discount of thirty per cent.

NATIONAL GEOGRAPHIC MAGAZINE, VOLUMES I-VI

	Prices.		Number of copies on hand for sale.
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TABLE OF CONTENTS.			
Volume I, 1889: 4 numbers, 337 pages, 16 plates, and 26 figures.....	\$1 40	\$2 00	
No. 1: pp. 1-98, i-ii, 6 plates	35	50	171
Announcement. Introductory Address by the President, Gardiner G. Hubbard. Geographic Meth- ods in Geologic Investigation; by W. M. Davis. The Classification of Geographic Forms by Genesis; by W J McGee. The Great Storm of March 11-14, 1888: Summary of Remarks by A. W. Greely. The Great Storm off the Atlantic Coast of the United States, March 11-14, 1888; by Everett Hayden. The Sur- vey of the Coast: by Herbert G. Ogden. The Sur- vey and Map of Massachusetts; by Henry Gannett. Proceedings. Certificate of Incorporation. By-laws. Officers, 1888. Members.			

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No. 2: pp. 99-182, 1 plate,.....	\$0 35	\$0 50	*
Africa, its Past and Future; Annual Address by the President, Gardiner G. Hubbard. Report—Geography of the Land; by Vice-President Herbert G. Ogden. Report—Geography of the Sea; by Vice-President George L. Dyer. Report—Geography of the Air; by Vice-President A. W. Greely. Report—Geography of Life; by Vice-President C. Hart Merriam. Annual Report of the Treasurer, Auditing Committee, and Secretaries. Certificate of Incorporation. Officers, 1889. By-laws. Members.			
No. 3: pp. 183-276, 2 plates and 26 figures.....	35	50	116
The Rivers and Valleys of Pennsylvania; by William Morris Davis. Topographic Models; by Cosmos Mindeleff. Abstract of Minutes. International Literary Contest.			
No. 4: pp. 277-335, 7 plates	35	50	
Irrigation in California; by William Hammond Hall. Round about Asheville; by Bailey Willis. A Trip to Panama and Darien; by Richard U. Goode. Across Nicaragua with Transit and Machete; by R. E. Peary.			
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No. 1: pp. 1-80.....	35	50	6
On the Telegraphic Determinations of Longitudes by the Bureau of Navigation; by J. A. Norris. Report—Geography of the Land; by Vice-President Herbert G. Ogden. Report—Geography of the Air; by Vice-President A. W. Greely. Reports of Treasurer, Auditing Committee, and Recording Secretary. Abstract of Minutes. Officers, 1890. Members.			
No. 2: pp. 81-170, 1 plate and 7 figures.....	35	50	*
The Rivers of Northern New Jersey, with Notes on the Classification of Rivers in General; by William Morris Davis. A Critical Review of Bering's First Expedition, 1725-'30, together with a Translation of his Original Report; by Wm. H. Dall.			
No. 3: pp. 171-230, 6 plates and 4 figures.....	35	50	*
The Arctic Cruise of the U. S. S. <i>Thetis</i> in the Summer and Autumn of 1889; by Charles H. Stockton. The Law of Storms Considered with Special Reference to the North Atlantic; by Everett Hayden. The Irrigation Problem in Montana; by H. M. Wilson.			

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Korea and the Koreans; by J. B. Bernadou. The Ordnance Survey of Great Britain; by Josiah Pierce, Jr. Geographic Nomenclature; by Herbert G. Ogden, Gustave Herrle, Marcus Baker, and A. H. Thompson.			
No. 5: pp. 287-339, i-viii.	18	25	3
Officers, 1890. Contents and Illustrations, volumes I and II. Announcement. Proceedings. Third Annual Report of the Secretaries. Report of the Treasurer and Auditing Committee. Summary of Reports on the Mount Saint Elias Expedition. By-laws. Standing Rules of the Board of Managers. Rules relating to Publication. Officers, 1891. Members, March 25, 1891. Index to Volumes I and II.			
Volume III, 1891: 5 numbers, 296 pages, 21 plates, and 8 figures.	\$1 60	\$3 00	169
No. 1: pp. 1-30, plate 1, March 28, 1891	15	25	193
South America; Annual Address by the President, Gardiner G. Hubbard.			
No. 2: pp. 31-40, April 30, 1891	10	25	176
Geography of the Land; Annual Report by Vice-President Herbert G. Ogden.			
No. 3: pp. 41-52, May 1, 1891.	10	25	169
Geography of the Air; Annual Report by Vice-President A. W. Greely.			
No. 4: pp. 53-204 (with 8 figures), plates 2-20, May 29, 1891	85	1 50	181
An Expedition to Mount St Elias; by I. C. Russell.			
No. 5: Magazine brochure, pp. 205-261, i-xxxv, plate 21, February 19, 1892	40	75	197
The Cartography and Observations of Bering's First Voyage; by A. W. Greely. Height and Position of Mount Saint Elias; by I. C. Russell. The Heart of Africa; by E. C. Hore. Report of Committee on Exploration in Alaska. Notes. Index. Officers, 1891. Contents. Illustrations. Publications. Proceedings. Officers, 1892. Members, 1892.			

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No. 1: pp. 1-18, March 26, 1892..... The Evolution of Commerce; Annual Address by the President, Gardiner G. Hubbard.	10	25	*
No. 2: pp. 19-84 (with 5 figures), plates 1-16, March 21, 1892..... Studies of Muir Glacier, Alaska; by Harry Field- ing Reid.	75	1 00	*
No. 3: pp. 85-100, March 18, 1892..... Geography of the Air; Annual Report by Vice- President A. W. Greely.	10	25	*
No. 4: pp. 101-116, plate 17, March 31, 1892..... The Mother Maps of the United States; by Henry Gannett.	15	25	*
No. 5: pp. 117-162, plates 18-20, May 15, 1892..... An Expedition through the Yukon District; by C. Willard Hayes.	30	50	*
No. 6: Magazine brochure, pp. 163-208, February 8, 1893..... The North American Deserts; by Johannes Walther. The Alaskan Boundary Survey; by T. C. Mendenhall, J. E. McGrath, and J. Henry Turner. Collinson's Arctic Journey; by A. W. Greely. Notes.	20	50	*
No. 7: Administrative brochure, pp. 209-213, i-xxiv, February 20, 1893..... Officers, 1892. Contents. Illustrations. Publica- tions. Fourth Annual Report of the Secretaries and Treasurer. Report of the Auditing Committee. Proceedings. Fifth Annual Report of the Secreta- ries and Treasurer. Report of the Auditing Com- mittee. Index.	15	25	*
Volume V, 1893: 6 numbers, 331 pages, 21 plates, and 5 figures.....	\$1 95	\$3 00	24
No. 1: pp. 1-20 (with 2 figures), plates 1-5, April 7, 1893..... Discoverers of America; Annual Address by the President, Gardiner G. Hubbard.	35	50	24
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No. 5: pp. 97-256, January 31, 1894..... Proceedings of the International Geographic Conference in Chicago, July 27-28, 1893: Introduction. Minutes of the Conference. Memoirs and Addresses. The Relations of Air and Water to Temperature and Life; by Gardiner G. Hubbard. The Relations of Geography to History; by Francis W. Parker. Norway and the Vikings; by Magnus Andersen. Geographic Instruction in the Public Schools; by W. B. Powell. The Relations of Geology to Physiography in our Educational System; by T. C. Chamberlin. The Relations of the Gulf Stream and the Labrador Current; by William Libbey, Jr. The Arid Regions of the United States; by F. H. Newell. Recent Explorations in Alaska; by Eliza Ruhamah Scidmore. The Caravels of Columbus; by Victor Maria Concas. In the Wake of Columbus; by Frederick A. Ober. Recent Disclosures concerning pre-Columbian Voyages to America in the Archives of the Vatican; by William Eleroy Curtis. Early Voyages along the Northwestern Coast of America; By George Davidson.	50	75	112	
No. 6: Administrative brochure, pp. 257-263, i-lxviii, May 5, 1894..... Officers, 1893. Contents. Illustrations. Publications. Proceedings. Sixth Annual Report of the Secretaries and Treasurer. Report of the Auditing Committee. By-laws. Officers, 1894. Honorary Members. Members, 1894. Index.	40	50	185	

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Volume VI, 1894 and to May 31, 1895: 9 numbers, 291 pages, 15 plates, and 11 figures.....	\$2 10	\$3 00	*
No. 1: pp. 1-22, February 17, 1894.....	15	25	*
Geographic Progress of Civilization; Annual Ad- dress by the President, Gardiner G. Hubbard.			
No. 2: pp. 23-34 (with 3 figures), plates 1-3, March 17, 1894.....	15	25	*
Shawangunk Mountain; by N. H. Darton.			
No. 3: pp. 35-62, April 25, 1894.....	15	25	*
Weather Making, Ancient and Modern; by Mark W. Harrington.			
No. 4: pp. 63-126 (with 3 figures), plates 4-6, May 23, 1894.....	40	75	*
Geomorphology of the Southern Appalachians; by C. Willard Hayes and Marius R. Campbell.			
No. 5: pp. 127-148 (with 1 figure), plates 7 and 8, June 22, 1894.....	15	25	*
The Battle of the Forest; by B. E. Fernow.			
No. 6: pp. 149-178 (with 1 figure), plate 9, Novem- ber 1, 1894.....	25	50	*
Surveys and Maps of the District of Columbia; by Marcus Baker.			
No. 7: Magazine brochure, pp. 179-238 (with 3 fig- ures), plates 10-14, December 29, 1894	35	50	*
The First Landfall of Columbus; by J. W. Red- way. Japan; by D. W. Stevens. Geography of the Air; Annual Address by Vice-President A. W. Greely. Sir Francis Drake's Anchorage; by E. L. Berthoud. Note on the Height of Mount Saint Elias; by I. C. Russell. Geographic Notes; by Cyrus C. Babb. Laws of Temperature Control of the Geo- graphic Distribution of Terrestrial Animals and Plants; Annual Address by Vice-President C. Hart Merriam.			
No. 8: pp. 239-284, April 20, 1895.....	35	50	280
Oregon: its History, Geography, and Resources; by John H. Mitchell.			
No. 9: Administrative brochure, pp. lxxxiii, plate 15, October 31, 1895.....	15	25	500
Officers, 1894. Contents. Illustrations. Publi- cations. Proceedings. Seventh Annual Report of the Recording Secretary and Treasurer. Report of the Auditing Committee. By-laws. Officers, Sea- son of 1895-'96. Members. Index.			

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IRREGULAR PUBLICATIONS

In the interest of exact bibliography, the Society takes cognizance of all publications issued either wholly or partly under its auspices. Each author of a memoir published in THE NATIONAL GEOGRAPHIC MAGAZINE receives 25 copies, and is authorized to order any number of additional copies at a slight advance on the cost of press-work and paper. Contributors to the magazine are authorized to order any number of copies of their contributions at a slight advance on cost of presswork and paper, provided these separates bear the original pagination and a printed reference to the serial and volume from which they are extracted; such separates are, of course, bibliographically distinct. The *Magazine* is not copyrighted, and articles may be reprinted freely; a record of such reprints, so far as known, is kept.

PROCEEDINGS
OF THE
NATIONAL GEOGRAPHIC SOCIETY
JANUARY, 1894, TO MAY, 1895

Abstract of Minutes

January 12, 1894.

89th meeting.

Assembly Hall of Cosmos Club, 8 p m. Vice-President Mendenhall in the chair. Attendance, 125.

Report of Auditing Committee, appointed the 5th instant, read and approved.

The general topic, "Surveys and Explorations in Southeastern Alaska for the Alaska Boundary Commission," was discussed by Dr T. C. Mendenhall, Mr J. E. McGrath, Mr H. G. Ogden, Mr W. C. Hodgkins, Mr P. A. Welker, and Mr H. P. Ritter. The subject was illustrated by maps and lantern slides.

January 19, 1894.

Special meeting.

National Rifles' Hall, 8 p m. President Hubbard in the chair. Attendance, 700.

Rev E. C. Smith delivered an illustrated lecture on The Ascent of Mount Rainier.

January 8, 11, 15, 18, 22, and 25, 1894.

Special course of afternoon lectures.

Large Hall of Columbian University, 4.15 p m.

Special course by Mr G. K. Gilbert on The Shaping of the Earth's Surface, under the divisions (1) Uplift and Erosion; (2 and 3) Water Work; (4) Interaction; (5) Ice Work; (6) Wind Work.

*January 26, 1894.**90th meeting.*

Assembly Hall of Cosmos Club, 8 p m. President Hubbard in the chair. Attendance, 75.

The thanks of the Society were voted to Mr G. K. Gilbert for his able and instructive course of afternoon lectures.

The general topic, Alaskan Boundary Surveys, was discussed in detail by Mr J. A. Flemer, Mr E. F. Dickins, Mr O. H. Tittmann, Mr J. F. Pratt, and Lieutenant A. P. Niblack, U. S. N., the last three of whom used lantern-slide illustrations.

*February 2, 1894.**91st meeting.*

Builders' Exchange Hall, 8 p m. Attendance, 300.

Annual address by the President, Hon Gardiner G. Hubbard, on The Geographic Progress of Civilization, illustrated by lantern slides.

*February 9, 1894.**92d meeting.*

Assembly Hall of Cosmos Club, 8 p m. President Hubbard in the chair.

Hon Edwin Willits introduced the speaker, Dr C. Hart Merriam, who read a paper on Geographic Discoveries Made by the Biological Expeditions of the United States Department of Agriculture.

*February 16, 1894.**Special meeting.*

Builders' Exchange Hall, 8 p m. President Hubbard in the chair. Attendance, 500.

Hon George C. Perkins, United States Senate, delivered an illustrated lecture on Pacific and Arctic Ocean Whaling Industry.

*February 23, 1894.**93d meeting.*

Assembly Hall of Cosmos Club, 8 p m. President Hubbard in the chair. Attendance, 50.

Professor Mark W. Harrington read a paper on Weather Making, Ancient and Modern.

*March 2, 1894.**Special meeting.*

Builders' Exchange Hall, 8 p m. President Hubbard in the chair. Attendance, 300.

Major J. W. Powell delivered an address upon The Water Supply of the United States.

*March 9, 1894.**94th meeting.*

Assembly Hall of Cosmos Club, 8 p m. Vice-President Gannett in the chair. Attendance, 50.

Dr C. Willard Hayes delivered an address upon The Physiography of a Portion of the Southern Appalachians, as Illustrated by a Relief Map of the Chattanooga District; and Mr M. R. Campbell read a paper on Tertiary Changes in the Drainage of Southwestern Virginia.

*March 16, 1894.**Special meeting.*

National Rifles' Hall, 8 p m. President Hubbard in the chair. Attendance, 700.

Professor William H. Pickering delivered an illustrated lecture upon Explorations in the Andes of South America.

*March 23, 1894.**95th meeting.*

Assembly Hall of Cosmos Club, 8 p m. President Hubbard in the chair. Attendance, 125.

The amendments to the by-laws proposed February 23 were laid upon the table. (These proposed amendments created five classes of members—Active Members, Fellows, Honorary Members, Honorary Fellows, and Corresponding Members.)

Mr Marcus Baker delivered an address upon The Survey and Maps of the District of Columbia.

*March 30, 1894.**Special meeting.*

Builders' Exchange Hall, 8 p m. President Hubbard in the chair. Attendance, 550.

Mr Willard D. Johnson delivered an illustrated lecture upon The Problem of the Yosemite.

*April 4, 1894.**Special meeting.*

Assembly Hall of Cosmos Club, 8 p m. Mr W J McGee in the chair. Attendance, 125.

Dr Carl Lumholtz delivered an illustrated address upon The Cliff-dwellers of Mexico.

*April 6, 1894.**96th meeting.*

Assembly Hall of Cosmos Club, 8 p m. Mr G. K. Gilbert in the chair. Attendance, 50.

Mr Henry Gannett read a paper upon Statistics of our Industries.

*April 13, 1894.**Special meeting.*

Builders' Exchange Hall, 8 p m. President Hubbard in the chair.

Mr H. M. Wilson delivered an illustrated address entitled From Bombay to the Himalayas.

*April 19, 1894.**97th meeting.*

Assembly Hall of Cosmos Club, 8 p m. Mr Henry Gannett in the chair. Attendance, 75.

The general topic was The Public Lands of the United States, discussed under the following heads and by the following speakers: The National Domain, by Mr F. H. Newell; The Texas Land System, by Mr R. U. Goode; The Public Lands of Idaho, by E. T. Perkins, Jr.; and The Public Domain in its Social Aspect, by Mr Arthur P. Davis. The papers were discussed by Mr J. B. Thompson and Mr W. A. Croffut.

*April 20, 1894.**Field meeting.*

Eighty members and guests attended an excursion to Virginia Beach and the Dismal Swamp. Mr G. K. Gilbert and Dr David T. Day took charge of the two parties, and in the evening a meeting was held at the Princess Anne Hotel, Virginia Beach.

*April 21, 1894.**Special meeting.*

National Rifles' Hall, 8 p m. President Hubbard in the chair. Attendance, 500.

Mr Frank Hamilton Cushing delivered an illustrated lecture upon The Geographic Origin and Distribution of the Pueblo Indians.

*May 4, 1894.**98th meeting.*

Assembly Hall of Cosmos Club, 8 p m. Mr G. K. Gilbert in the chair. Attendance, 125.

Mr Henry Farquhar, in behalf of the excursion party to the Dismal Swamp, thanked the committee for the able and efficient manner in which the plans were carried out.

Mr R. T. Hill delivered an illustrated lecture upon The Mountains of Mexico, and remarks were made by Mr H. M. Wilson and Señor Don M. Romero, the Mexican minister.

*May 11, 1894.**Special meeting.*

Builders' Exchange Hall, 8 p m. President Hubbard in the chair. Attendance, 600.

Mr Paul B. Du Chaillu delivered an illustrated lecture upon The Dwarfs and Forests of Central Africa.

*May 18, 1894.**99th meeting.*

Assembly Hall of Cosms Club, 8 p m. Dr C. Hart Merriam in the chair. Attendance, 75.

Dr T. C. Mendenhall read a paper upon The Northeastern Boundary of the United States.

Professor R. T. Hill spoke of The Geography of Cuba; and Professor C. V. Riley discussed The Periodic Appearance of the Cicada.

*May 25, 1894.**Special meeting.*

Builders' Exchange Hall, 8 p m. President Hubbard in the chair. Attendance, 500.

Mr Alfred F. Sears delivered an illustrated lecture upon Peru.

*June 1, 1894.**100th meeting.*

Large Hall of Columbian University, 8 p m. President Hubbard in the chair. Attendance, 250.

Letters of congratulation to the Society upon the occasion of its one hundredth regular meeting were read from Hon Charles P. Daly, president of the American Geographical Society, and from Mr P. S. Moxom, president of the Appalachian Mountain Club. General A. W. Greely, U. S. A., spoke upon The Work of Foreign Geographic Societies, and remarks were made by Bishop John J. Keane, Hon J. H. Outhwaite, Dr J. C. Welling, and Mr Charles D. Walcott.

(For remaining meetings, up to May 31, 1895, see accompanying Calendar, season of 1894-'95.)

NATIONAL GEOGRAPHIC SOCIETY CALENDAR, SEASON OF
1894-'95

Oct. 19.* Japan: its Geography, Resources, and Future,
Hon D. W. Stevens
Introductory Remarks by His Excellency Mr Kurino, the
Japanese Minister.

Oct. 26.* The Elements of Physiography.....Major J. W. Powell

Nov. 2.† The Science of Geography...General A. W. Greely, U. S. A.
The First Landfall of Columbus in the Light of Early Car-
tography.....Mr J. W. Redway

Nov. 9.* Physiographic Processes.....Major J. W. Powell

Nov. 16.† The Origin and Configuration of the Upper Alpine Passes,
Dr Lafayette C. Loomis

Nov. 23.* From Cape Town into the Countries of the Ma-Shukulumbe,
Dr Emil Holub

Nov. 30.† Recent Results in Oceanography,
Ensign Everett Hayden, U. S. N.
The Sigsbee Deep-sea Sounding Machine,
Commander C. D. Sigsbee, U. S. N.
The Outfit and Cruises of the U. S. F. C. S. *Allatross*,
Commander Z. L. Tanner, U. S. N.

Dec. 7.* The Land of the Midnight Sun.....Mr Paul B. Du Chaillu

Dec. 14.† The Geographic Distribution of Soils,
Professor Milton Whitney
The Geographic Distribution of Life....Dr C. Hart Merriam

Dec. 21.* The Political Geography of Asia.....Hon John W. Foster

Dec. 28. The Economic Aspects of Erosion....Professor N. S. Shaler
Joint Meeting with American Forestry Association, in the
National Museum. Introductory Remarks by Hon J.
Sterling Morton, Secretary of Agriculture.

Jan. 4.* Labor and Industries of the South....Hon Carroll D. Wright

Jan. 11.† The Northern Appalachians Mr Bailey Willis

Jan. 18.* The Nicaragua Canal.....Hon John R. Procter

Jan. 25.† The Pikean, Julian, Plantagenian, and Itasca Sources of
the Mississippi Elliott Coues, M. D.

Feb. 1.* The Seine, the Meuse, and the Moselle,
Professor William M. Davis

Feb. 8.† Topographic Forms,
Major Gilbert Thompson, Mr G. W. Littlehales

Feb. 15.* Shakespeare's England.....Rev G. Arbuthnot

Feb. 22.† Practical Results of the Bering Sea Arbitration,
Mr J. Stanley-Brown

Mar. 1.* Recent Discoveries in Assyria and Babylonia,
Rev Dr Francis Brown

¶Mar. 8.|| The International Boundary between Mexico and the United States Mr A. T. Mosman,
Mr Stehman Forney,
Captain E. A. Mearns, U. S. A.

¶Mar. 15.* The Ottoman Empire Dr Cyrus Adler

¶Mar. 18.¶ Washington to Pittsburg and to Niagara Falls :
 Across the Appalachians Dr David T. Day
 Side Trip to Niagara Falls Mr G. K. Gilbert

Mar. 20. Reception at the Arlington Hotel, Washington, D. C.,
 9 to 12 p m.

¶Mar. 22.¶ Pittsburgh to Yellowstone National Park :
 Pittsburgh to St Paul, through the Oil and Gas Regions,
 Professor Edward Orton
 St Paul to Yellowstone National Park; Wonderland of
 the Yellowstone Mr Henry Gannett

¶Mar. 22.|| The Alaskan Boundary Survey,
 Mr J. E. McGrath, Mr J. F. Pratt, Mr H. P. Ritter

¶Mar. 25.‡ Yellowstone National Park to Sacramento :
 The Northern Rockies; Down the Columbia; Mount
 Rainier and Portland Mr E. T. Perkins, Jr.
 Portland to Crater Lake; Mount Shasta and Sacramento,
 Mr J. S. Diller

¶Mar. 29.‡ Sacramento to Northern Arizona :
 Sacramento; the Golden Gate; Yosemite; Los Angeles;
 San Bernardino Mr Arthur P. Davis
 From San Bernardino across the Deserts to San Francisco
 Mountain, Arizona Major J. W. Powell

Mar. 29.* Oregon: its Geography, History, and Resources,
 Hon J. H. Mitchell

¶April 2.‡ The Grand Canyon and Sonora, Mexico :
 Salt Lake City to the Grand Canyon; a Winter in the
 Depths of the Canyon Mr Charles D. Walcott
 Prescott, Phenix, and Tucson, to Sonora, Mexico; Visit
 to the So-called Cannibals Mr W J McGee

¶April 4.‡ The Zulu-Ma-Atabele, and Modes of Travel in South Africa,
 Dr Emil Holub

¶April 5.‡ Across the Rocky Mountains to Denver :
 Northern Arizona, the Rio Grande, and across the Moun-
 tains to Denver Professor A. H. Thompson
 The Home of the Pueblo Indians,
 Mr Frank Hamilton Cushing

April 5.† Some Physical Features of Lake Superior,
 Professor Mark W. Harrington

¶April 8.‡ Denver to Washington :
 Denver to Pueblo, down the Arkansas River, and across
 the Plains to St Louis Mr F. H. Newell
 St Louis to Washington; the Great Caves of Kentucky
 and Virginia Major Jed. Hotchkiss

April 12.|| The Physical Geography, Geology, Agriculture, Religions, and Missionary Literary Institutions of the Turkish Empire,
Rev Henry H. Jessup, D. D.

¶April 19.† The Geography and Geology of Costa Rica and Panama,
Mr Robert T. Hill

¶April 26.* The Antiquities and Aborigines of Peru,
Mr Frank Hamilton Cushing

¶April 29.‡ Siberia: its Geography and Resources... Mr George Kennan

May 3.* Fredericksburg and Vicinity; a Symposium Preparatory to the Field Day:
Geography and Geology (15 minutes)... Mr N. H. Darton
Surveying, Mapping, and Bridging (15 minutes),
Major Gilbert Thompson

The Battles:
* As seen from the Northern Side (20 minutes),
General John Gibbon, U. S. A.
As seen from the Southern Side (20 minutes),
Major Jed. Hotchkiss, C. S. A.

May 4. Excursion and Field Meeting, Fredericksburg, Virginia, 9 a m to 6 p m.

¶May 10.* President's Annual Address: Russia. (Joint Meeting of the Scientific Societies). Hon Gardiner G. Hubbard

May 17.† The United States Commission of Fish and Fisheries and its Relations with the Navy.. Commander Z. L. Tanner, U.S. N.

¶May 24.|| The Geography and Geology of Costa Rica and Panama. (Repeated by request) Mr Robert T. Hill

May 31.† Annual Meeting for Reports, Action on Amendments to By-laws, and Election of Officers.

* National Rifles' Hall, 8 to 9.15 p.m.

† Cosmos Club Hall, 8 to 10 p m

† National Rifles' Hall, 4.15 to 5.30 p.m.

§ Lecture illustrated by lantern slides.

¶ Columbian University, 8.15 to 9 30 p m

Columbian University, 4.15 to 5.30 p m

SEVENTH ANNUAL REPORT OF THE RECORDING SECRETARY

(Presented to the Society May 31, 1895)

OFFICE OF THE SECRETARY,
1515 H STREET N. W.,
WASHINGTON, D. C., May 31, 1895.

The season ending today has been one of the most successful in the annals of the Society, not only as regards increase of membership, but by reason of the great interest shown in the meetings, the large attendance of members and guests, and the character and number of the papers read.

The present membership is 1,178, consisting of 893 active, 274 corresponding, and 11 honorary members. Of this total number 423 have been elected since January 1, 1894, and 365 since June 1, 1894, numbers largely in excess of those elected during a similar period at any former time in our history.

To illustrate graphically the number of members elected each month since the Society was organized (in January, 1888), the length of time each member has remained in the Society, and the present membership, the accompanying membership diagram has been prepared. A glance at this diagram indicates very clearly the fact that our membership has increased very rapidly, and that a comparatively small proportion of those elected discontinue their membership. (See Plate 15.)

The change in the Society's fiscal year from the calendar year to that of the year from June 1 to May 31, now in effect, has of course been attended with some little embarrassment in connection with the publication of the *Magazine*, the dues of members, etc, but the great advantages of the change more than outweigh such temporary difficulties. By far the greater part of the energy of the Society is expended during the winter season, and it is therefore very desirable that its management should be continuous from summer to summer, rather than that there should be a periodic change, or at least liability to change, of its Board of Managers in the midst of the season of its greatest activity.

Owing to this change, the period now under review covers the interval from January 1, 1894, to date, but for comparison with future seasons, and as a just indication of what may fairly be expected during each coming season, it is of interest to review some of the principal features of our operations during the period from October last up to the present time.

During this season we have had 17 regular meetings and 28 special meetings, the latter including the reception, field meeting, and joint meeting of the Scientific Societies, making a total of 45 meetings, with 75 speakers. The average attendance at the regular or technical meetings (held for the most part in the Assembly Hall of the Cosmos Club) has been 170, and at the special or popular meetings (in National Rifles' Hall), 777. As a comparative measure of the Society's activity it need only be added that in 1890 there were but 17 meetings held altogether, with far smaller average attendance.

Especial interest has been shown in a course of illustrated afternoon lectures descriptive of a trip across the continent and back again, each lecture by two speakers who took up the thread of the story, in turn, and described in a popular way, and with a very fine series of lantern illustrations, the geography and most striking natural and artificial features of the region traversed. Each speaker was a recognized authority regarding his portion of the route, and the course proved to be a brilliant and gratifying success—so much so, in fact, that a similar course will undoubtedly be a feature of each of our coming seasons.

The accompanying calendar gives a brief but complete résumé of the entire series of lectures, so that but little more need be said. Reference should be made, however, to the very successful reception at The Arlington the evening of March 20th, and the excursion to Fredericksburg, Va., on May 4th, where a field-meeting was held and the day passed amidst scenes of great natural beauty as well as of great geographic and historic interest. None of the expense of the reception or excursion was charged to the Society's treasury, but those who participated paid the entire cost, which was, of course, comparatively small, by reason of the excellent management by the committees and the facilities secured by the organization of the Society.

Mention should be made of a lecture delivered under the auspices of the Society by Mrs Robert E. Peary, in aid of the fund to equip an expedition to bring her husband, the distinguished

arctic explorer, home this summer, at the close of his season's work in northern Greenland, rather than leave him there to endure the useless delay and hardship of another arctic winter. Our Board of Managers, as a slight recognition of interest in and approval of the plan, voted to appropriate a sum sufficient to pay the expenses of a lecture by Mrs Peary and to give her the gross receipts, and in this way, thanks largely to her own energy and the interest of the public in her fascinating story of arctic life, the Society was enabled, at comparatively small expense, to add \$400 to the fund—a result especially gratifying by reason of the fact that Lieutenant Peary is one of our own members. This incident furnishes in itself a good example of the practical effectiveness of our organization in aiding actual geographic research, as well as in increasing and diffusing geographic knowledge.

Strong support has been given during past years by our Board of Managers to the project of uniting into a closer union the various scientific societies of this city, and during the past season this object has been consummated in a way that is gratifying to its earnest supporters and at the same time satisfactory to the more conservative. The present organization and powers of the Joint Commission seem to be worthy of strong support and approval, and there is every reason to believe that its practical results will be satisfactory and mutually advantageous to the societies represented.

The meeting this summer in London of the Sixth International Geographical Congress promises to mark an epoch in the history of geographic progress, and this Society will be represented by a delegation which, by authority of the Board of Managers, will extend a cordial invitation to the Congress to hold its next meeting in this city. It is hoped that this eminent and influential body will soon honor this country with its presence, and our Society can then justly claim to have aided very greatly in the advance of geographic knowledge in the United States, as the far-reaching influence of such a meeting can hardly be overestimated.

The library of the Society has received, in addition to the regular exchanges, a large number of valuable gifts, notable amongst which have been complete sets of Wheeler's and Ives' Reports, through the courtesy of the Chief of Engineers, U. S. Army; several very handsome volumes from His Imperial Highness the Archduke Ludwig Salvator, of Austria; and a

number of standard geographic works from Mr E. L. Berthoud, of Golden, Colorado. The library is now well worthy of a larger and more accessible room than has been available hitherto; this matter is now under consideration and will doubtless soon be settled in a way that will add greatly to our facilities for geographic study.

THE NATIONAL GEOGRAPHIC MAGAZINE, the official publication of the Society, has maintained its high standard in spite of the difficulties of publication by a committee whose members can ill afford the time and effort required. It is but fair to state that by far the greater part of the work and responsibility has fallen to the chairman of the committee, Mr W J McGee, to whom credit for results achieved, in spite of many difficulties, is therefore largely due. The accompanying complete statement of the contents of the *Magazine*, volumes I to VI, with a list of prices and number of copies on hand for sale, will, it is thought, be of general interest to members and others. From this statement it will be seen, too, that it is proposed to publish the *Magazine* hereafter bimonthly.

For the coming season it is thought desirable to secure still larger halls for both our popular and technical meetings, as we have entirely outgrown those hitherto used. Arrangements have already been made to bring about this result, and the coming season will doubtless show a still larger membership and attendance. It is likely, too, that a plan will be perfected by which regular notices of meetings can be sent to every member—if not weekly, at least every two weeks—in place of the calendars that have been issued from time to time, at irregular intervals, during the past year. It should be understood, however, that the advantages of such regular notices have not at any time been underestimated, but the item of expense for postage has been very heavy—indeed, far more so than one can realize at first thought. With 900 active members a weekly notice—even using postal cards—costs, including printing and addressing, about \$12.00, or say \$400 a year, and it was thought that if half of this amount could be saved, without material inconvenience, it was well worth trying; the printing is a small item in comparison with the expense of postage, and the calendars that have been issued, in conjunction with the notices in the daily press each week, would seem to answer the purpose almost as well and at far less expense.

The thanks of the Society are due to the authorities of Columbian University for the use upon several occasions of their large hall free of expense; to the many able and eminent men who have contributed so largely to the value and success of our meetings, animated solely by their love of the subject and their appreciation of the objects of the Society; and to the members of the Board of Managers, who have devoted so much of their time and energy to the duties of their positions, feeling sufficiently rewarded by the growth and success of the Society. Without such earnest and voluntary assistance on every side it would, of course, be wholly impossible to accomplish what we are doing, even with largely increased annual dues, and the fact that this Society, although so young in years, is so firmly established and doing such effective work can justly be regarded as creditable to the United States, and especially to its birthplace, the city of Washington.

EVERETT HAYDEN,
Recording Secretary.

SEVENTH ANNUAL REPORT OF THE TREASURER

(Presented to the Society May 31, 1895)

WASHINGTON, D. C., May 31, 1895.

To the President and Members, National Geographic Society:

I have the honor to submit herewith my annual report, together with statement of assets as at the close of the year ending May 31.

On account of alterations made in the by-laws, by which the end of the fiscal year was changed from December 31 to May 31, the present account covers a period from January 1, 1894, to May 31, 1895.

The receipts for dues for the season of 1894 amounted to \$2,811, while those for that of 1895 amount to \$3,642, or an increase of nearly 30 per cent.

The assets of the Society consist of:

American Security and Trust Company 5 per cent bonds.....	\$450 00
Cash on hand, deposited with Bell & Co.....	\$107 49
in possession of Secretary.....	50 00
	157 49
Unpaid dues for the years 1894 and 1895	1,321 00
	\$1,928 49

All bills up to this date have been paid, and therefore there are no liabilities.

Respectfully submitted.

C. J. BELL,
Treasurer.

THE TREASURER in account with THE NATIONAL GEOGRAPHIC SOCIETY.

THE TREASURER in account with THE NATIONAL GEOGRAPHIC SOCIETY.

WASHINGTON, D. C., May 31, 1895.

C. J. BELL, *Treasurer*:

REPORT OF THE AUDITING COMMITTEE

(Presented to the Society May 31, 1895)

WASHINGTON, D. C., July 10, 1895.

The President and Members of the National Geographic Society:

We, a committee appointed at the annual meeting of May 31, 1895, to audit the accounts of the Treasurer for the period from January 1, 1894, to May 31, 1895, beg to submit the following report:

The Treasurer's statement of receipts, consisting of dues from members, life-membership fees, interest on investments, sale of magazines and tickets, and of amounts received from miscellaneous sources, has been examined and found correct, as shown by the books of his office.

The vouchers for expenditures have been examined and found correct. The return checks (except fifteen which had not been cashed at time of the closing of the Treasurer's account) were compared with the vouchers and found to agree.

We have examined the bank book, showing the account with Messrs Bell & Co., and found the cash balance to be four hundred and twenty-nine dollars and sixty cents, which exceeded the Treasurer's reported balance of one hundred and seven dollars and forty-nine cents by three hundred and twenty-two dollars and eleven cents, the amount of the fifteen return checks referred to in the paragraph above, one of which represented \$50 advanced to the Secretary.

The amount of outstanding dues reported by the Treasurer as \$1,326 was carefully examined and found correct. We have prepared a full list of these outstanding dues for the use of the next Auditing Committee.

The four bonds of \$100 each and one of \$50, registered in the name of the Society, were inspected by us in the hands of the Treasurer.

Wm. A. DeCAINDRY,
H. C. RIZER,
Auditing Committee.
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BY-LAWS

AS ADOPTED WITH AMENDMENTS UP TO MAY 31, 1895

ARTICLE I. NAME.

The name of this Society is the "NATIONAL GEOGRAPHIC SOCIETY."

ARTICLE II. OBJECT.

The object of this Society is the increase and diffusion of geographic knowledge.

ARTICLE III. MEMBERSHIP.

The members of this Society shall be persons who are interested in geographic science. There may be three classes of members—active, corresponding, and honorary.

Active members only shall be members of the corporation; shall be entitled to vote and may hold office.

Persons residing at a distance from the District of Columbia may become corresponding members of the Society. They may attend its meetings, take part in its proceedings, and contribute to its publications.

Persons who have attained eminence by the promotion of geographic science may become honorary members.

Corresponding members may be transferred to active membership, and, conversely, active members may be transferred to corresponding membership by the Board of Managers.

The election of members shall be entrusted to the Board of Managers.

ARTICLE IV. OFFICERS.

The officers of the Society shall be a President, six Vice-Presidents, a Treasurer, a Recording Secretary, and a Corresponding Secretary.

The above-mentioned officers, together with eight other members of the Society, known as Managers, shall constitute a Board of Managers. Officers and Managers shall be elected annually, by ballot, a majority of the votes cast being necessary to an election; they shall hold office until their successors are elected; and shall have power to fill vacancies occurring during the year.

The President, or, in his absence, one of the Vice-Presidents, shall preside at the meetings of the Society and of the Board of Managers; he shall, together with the Recording Secretary, sign all written contracts and obligations of the Society, and attest its corporate seal; he shall deliver an annual address to the Society.

Each Vice-President shall represent in the Society and in the Board of Managers a department of geographic science, as follows:

Geography of the Land; Geography of the Sea; Geography of the Air; Geography of Life; Geographic Art; Commercial Geography.

The Vice-Presidents shall foster their respective departments within the Society; they shall present annually to the Society summaries of the work done throughout the world in their several departments.

They shall be elected to their respective departments by the Society.

The Treasurer shall have charge of the funds of the Society, shall collect the dues, and shall disburse under the direction of the Board of Managers; he shall make an annual report; and his accounts shall be audited annually by a committee of the Society and at such other times as the Board of Managers may direct.

The Secretaries shall record the proceedings of the Society and of the Board of Managers; shall conduct the correspondence of the Society; and shall make an annual report.

The Board of Managers shall transact all the business of the Society, except such as may be presented at the annual meeting. It shall formulate rules for the conduct of its business. Five members of the Board of Managers shall constitute a quorum at regular meetings and nine members at special meetings.

ARTICLE V. DUES.

The initiation fee for active members shall be two dollars, payable upon notice of election.

The annual dues of active members shall be five dollars, and of corresponding members two dollars.

The fiscal year and season of the Society shall begin on the first day of June and end on the thirty-first day of May, and the annual dues of members shall be payable on or before the last day of October, or, in the case of new members, within thirty days after election.

Annual dues may be commuted and life membership acquired by the payment of fifty dollars.

No member in arrears shall vote at the annual meeting, and the names of members two years in arrears shall be dropped from the roll of membership.

ARTICLE VI. MEETINGS.

Regular meetings of the Society shall be held on alternate Fridays, from November until May, and excepting the annual meeting they shall be devoted to communications. The Board of Managers shall, however, have power to postpone or omit meetings, when deemed desirable. Special meetings may be called by the President.

The annual meeting for the election of officers shall be the last regular meeting in May.

The Board of Managers shall set apart a time and place for the annual address of the President and Vice-Presidents.

A quorum for the transaction of business shall consist of twenty-five active members.

ARTICLE VII. PUBLICATIONS.

The Society shall publish a journal or periodical under the title THE NATIONAL GEOGRAPHIC MAGAZINE, which shall be sent to all members of the Society and may be placed on sale.

ARTICLE VIII. AMENDMENTS.

These by-laws may be amended by a two-thirds vote of the members present at any regular meeting, provided that written notice of the proposed amendment has been given, signed by at least ten active members, at a regular meeting held at least four weeks previously. They may also be amended by a two-thirds vote of the voters present at the annual meeting: provided, however, that written notice of the proposed amendment has been given at a regular meeting held at least four weeks previous to the annual meeting.

Printed notice shall be sent to all active members of amendments proposed for action at the annual meeting.

OFFICERS OF THE SOCIETY

SEASON OF 1895-'96

(*Elected at the Annual Meeting, May 31, 1895*)

President

GARDINER G. HUBBARD

Vice-Presidents

CHAS. W. DABNEY, JR, *Land*

HERBERT G. OGDEN, *Sea*

A. W. GREELY, *Air*

C. HART MERRIAM, *Life*

W. W. ROCKHILL, *Geographic Art*

HENRY GANNETT, *Commercial Geography*

Treasurer

CHARLES J. BELL

Recording Secretary

EVERETT HAYDEN

Corresponding Secretary

ELIZA R. SCIDMORE

Managers

MARCUS BAKER

W J McGEE

H. F. BLOUNT

F. H. NEWELL

G. K. GILBERT

W. B. POWELL

JOHN HYDE

J. R. PROCTER

MEMBERS OF THE NATIONAL GEOGRAPHIC SOCIETY

MAY 31, 1895

HONORARY MEMBERS

**HIS EXCELLENCY GROVER CLEVELAND,
PRESIDENT OF THE UNITED STATES,**

Washington, D. C.

**DON CHRISTÓBAL COLÓN DE TOLEDO DE LA CERDA Y GANTE,
DUKE OF VERAGUA AND MARQUIS OF JAMAICA,**

Madrid, Spain.

SIR ARCHIBALD GEIKIE,

28 Jermyn street, London, England.

HONORABLE CHARLES P. DALY,

84 Clinton place, New York, N. Y.

DR GEORGE M. DAWSON,

Canadian Geological Survey, Ottawa, Canada.

EMMANUEL DE MARGERIE

132 rue de Grenelle, Paris, France.

DR JOHN MURRAY,

Challenger office, Edinburgh, Scotland.

BARON ADOLF E. NORDENSKIÖLD,

Stockholm, Sweden.

FERDINAND, FREIHERR VON RICHTHOFEN,

Kurfürstenstrasse 117, Berlin W., Germany.

**HIS IMPERIAL HIGHNESS THE ARCHDUKE LUDWIG SALVATOR
OF AUSTRIA,**

Vienna, Austria.

DR D. ESTANISLAO S. ZEBALLOS,

Buenos Ayres, Argentina.

ACTIVE MEMBERS

ABBE, PROFESSOR CLEVELAND,	Weather Bureau.
ABBOTT, MRS G. E.,	2611 Fourteenth street.
ABERT, S. T.,	722 Seventeenth street.
ABRAHAMS, MISS L. C.,	1106 New Hampshire avenue.
ACKERMAN, LIEUTENANT A. A., U. S. Navy,	Navy Department.
ACKLEY, LIEUTENANT COMMANDER S. M., U. S. Navy,	Commanding U. S. S. <i>Yantic</i> .
ADAMS, CYRUS C.,	512 Madison street, Brooklyn, N. Y.
ADAMS, MISS JULIA M.,	Fourth Auditor's office.
ADDISON, A. D.,	808 Seventeenth street.
ADDISON, MRS MURRAY,	1756 N street.
ADLER, DR CYRUS,	Smithsonian Institution.
ALBRECHT, F. J.,	175 Fifth avenue, Chicago, Ill.
ALDEN, COLONEL C. H., U. S. Army,	War Department.
ALEXANDER, T. H.,	1207 N street.
ALLEN, REVEREND ADOLOS,	905 I street.
ALLEN, MISS A. AUGUSTA,	Care of Miss Van Dyke, 1301 K street.
ALLEN, DR J. A.,	American Museum of Natural History, New York, N. Y.
ALLENDER, CHARLES H.,	705 Twelfth street N. E.
ALTON, EDMUND,	1706 Pennsylvania avenue.
ALVORD, MAJOR HENRY E.,	Lewinsville, Fairfax county, Virginia.
AMES, JOHN G.,	1600 Thirteenth street.
ANDERSON, JOS. W., M. D.,	1911 Eleventh street.

Active Members.

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ANDREWS, COLONEL G. L., U. S. Army,	2400 Columbia road.
ANDREWS, ENSIGN PHILIP, U. S. Navy,	U. S. S. <i>Raleigh</i> .
ANDREWS, WELLS F.,	Treasury Department.
APELIN, S. A., JUNIOR,	U. S. Geological Survey.
APPLEBY, J. F. R., M. D.,	1430 Thirty-third street.
ARRIAGA, SEÑOR DON A. LAZO, E. E. and M. P.,	1755 M street.
ASHLEY, OSBORN,	428 New Jersey avenue.
ASPINWALL, REVEREND J. A.,	17 Dupont circle.
ATKINSON, WADE H., M. D.,	618 Twelfth street.
AUERBACH, CARL,	800 Seventh street.
AUHAGEN, WILHELM,	Naval Observatory.
AYDELLOTTE, WM.,	1352 Q street.
AYRES, MISS SUSAN C.,	1813 Thirteenth street.
BABB, CYRUS C.,	U. S. Geological Survey.
BABCOCK, MAJOR J. B., U. S. Army,	2005 G street.
BACON, MRS E. O.,	915 Sixteenth street.
BADGER, COMMODORE O. C., U. S. Navy,	1517 Twentieth street.
BAILEY, PAST ASSISTANT ENGINEER F. H., U. S. Navy,	Navy Department.
BAILEY, VERNON,	Agricultural Department.
BAKER, MARCUS,	U. S. Geological Survey.
BALDWIN, A. L.,	722 Sixth street N. E.
BALDWIN, H. L., JUNIOR,	U. S. Geological Survey.
BALDWIN, WM. D.,	25 Grant place.
BALL, CHARLES B.,	942 T street.

BALLANTYNE, Wm.,	1328 Vermont avenue.
BALLINGER, Mrs MADISON A.,	1303 Clifton street.
BALLOCH, GENERAL G. W.,	P. O. Box 557.
BARBER, A. L.,	802 F street.
BARBER, AMHERST W.,	1216 D street N. E.
BARCLAY, Mrs MARY M.,	1771 Madison street.
BARKER, CAPTAIN A. S., U. S. Navy,	Navy Yard, Mare Island, Cal.
BARNARD, E. C.,	U. S. Geological Survey.
BARNARD, JOB,	1306 Rhode Island avenue.
BARNARD, R. P.,	1011 O street.
BARRINGTON, Wm. L.,	3514 N street.
BARRY, CHARLES E.,	1421 G street.
BARTLE, R. F.,	Falls Church, Va.
BARTLETT, CAPTAIN J. R., U. S. Navy,	Providence, R. I.
BARTON, Miss MARY L.,	Treasury Department.
BATCHELDER, GENERAL R. N., U. S. Army,	War Department.
BATES, MAJOR F. H., U. S. Army,	1519 Thirty-first street.
BATES, DR HENRY H.,	The Portland.
BATES, MEDICAL DIRECTOR NEWTON L., U. S. Navy,	The Shoreham.
BEAMAN, GEORGE HERBERT,	2232 Massachusetts avenue.
BEAMAN, Wm. M.,	U. S. Geological Survey.
BEARDSLEY, MEDICAL DIRECTOR G. S., U. S. Navy,	1704 Connecticut avenue.
BECKHAM, Miss BLANCHE,	2721 N street.
BELL, DR A. GRAHAM,	1331 Connecticut avenue.

Active Members.

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BELL, PROFESSOR A. MELVILLE,	1525 Thirty-fifth street.
BELL, C. J.,	1405 G street.
BELL, MISS GERTRUDE A.,	Takoma Park, D. C.
BELT, E. OLIVER, M. D.,	The Albany.
BENNETT, F. V.,	The Arlington.
BENTON, FRANK,	Agricultural Department.
BERGER, ADOLPHE,	Pension Office.
BERGMANN, H. H.,	511 Seventh street.
BESSELIEVRE, S. I.,	Navy Department.
BEVERIDGE, M. W.,	1618 H street.
BIEN, JULIUS,	140 Sixth avenue, New York, N. Y.
BIEN, JOSEPH R., C. E.,	140 Sixth avenue, New York, N. Y.
BIEN, MORRIS,	General Land Office.
BIGELOW, PROFESSOR FRANK H.,	1625 Massachusetts avenue.
BIGELOW, OTIS,	Avenel, Md.
BIRCH, CHARLES E.,	Hydrographic office, Navy Department.
BLACK, H. CAMPBELL,	2516 Fourteenth street.
BLAIR, H. B.,	U. S. Geological Survey.
BLANCHARD, HONORABLE N. C.,	U. S. Senate.
BLOUNT, HENRY F.,	3101 U street.
BLOUNT, MRS L. E.,	3101 U street.
BOARDMAN, W. J.,	1801 P street.
BOCK, MISS M. C.,	619 Maryland avenue N. E.
BOND, MISS MARY E.,	813 First street.

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BOND, SAMUEL R.,	13 Iowa circle.
BONHAM, JOHN M.,	Cosmos Club.
BOUDE, JOHN K., M. D.,	905 R street.
BOYLE, PEYTON,	1425 New York avenue.
BRACE, MRS HELEN D.,	1316 Thirtieth street.
BRADFORD, COMMANDER R. B., U. S. Navy,	1522 P street.
BRADLEY, HONORABLE A. C.,	2013 Q street.
BRADLEY, GEORGE L.,	2035 P street.
BRADLEY, MRS J. M.,	816 K street.
BRANNER, DR J. C.,	Leland Stanford Junior University, Cal.
BRECKINRIDGE, GENERAL J. C., U. S. Army,	War Department.
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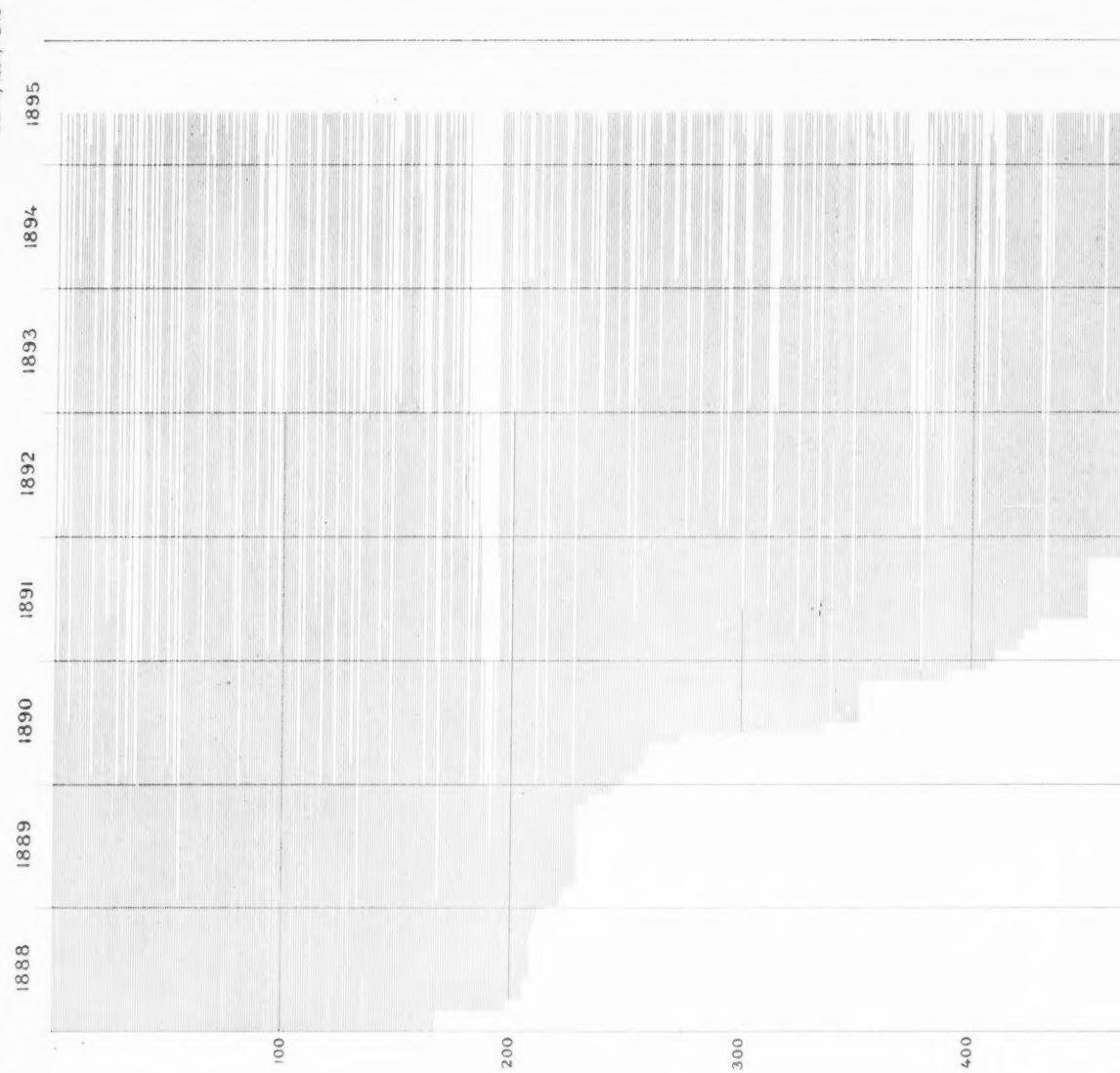
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SUMMARY.

Honorary members	11
Active members	893
Corresponding members	<u>274</u>
Total membership, May 31, 1895	1,178



500

600

700

800

900

600

700

800

900

1000

1100

1200

MEMBERSHIP DIAGRAM
NATIONAL GEOGRAPHIC SOCIETY

The fine parallel lines represent the total membership of the Society from its organization, in January, 1888, to May 31, 1895; that is, its *aggregate membership*.

Each line shows the date of election and duration of membership of an individual member, in order of election, the months of election and discontinuance being included in the line; a break in the line indicates a discontinuance of membership during that interval.

The diagram is thus a graphic and accurate representation of the number of members originally and in any stated month; the number elected each month and year; and the number of memberships discontinued and renewed, with the date (month) of such changes.

Original membership, January, 1888.

-

167.

Present membership, May 31, 1895,

-

1,178.

Aggregate membership, Jan., '88, to May, '95,

-

1,496.

1300
1400

1500

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